

REFLECTIVE LIGHT COUPLER

Abstract

5 An illumination system has individual light emitting diodes (LEDs) that are optically coupled via reflective couplers to respective optical fibers. The respective optical fibers may then be bundled. The shape of the reflective coupler may be selected to increase the coupling efficiency between the LED and its optical fiber. The reflective coupler may be formed as an aperture through a sheet, having a first shape at the input side and a second shape, different from the first shape, at the second side. The reflective coupler may be formed as an aperture
10 through a body, where at least a first portion of the interior surface of the aperture conforms to a two-dimensional (2-D) surface and at least a second portion of the interior surface conforms to a three-dimensional (3-D) surface.